

January 29, 2013

Dania Zinner USEPA; Region 8 1595 Wynkoop Street (8EPR-SR) Denver, CO 80202-1129

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Dear Ms. Zinner:

EPA CONTRACT NUMBER EP-W-10-033 TASK ORDER NUMBER 2019 QA SUPPORT FOR THE LIBBY ASBESTOS SITE

Enclosed please find the Fourth Quarter 2012 Quarterly QA Report. This report is a deliverable under Task 6 of the subject Task Order.

If you have any questions, please feel free to contact me.

Sincerely,

Timothy L. Vonnahme

Audit Group Manager, QATS Program

cc: Shari Myer, EPA-ASB QATS Project Officer Administrative Contracting Officer (Letter only) Audit Group Files







#### TECHNICAL MEMORANDUM

TO: Dania Zinner, USEPA Region 8

FROM: Michael Lenkauskas, Shaw Environmental, Inc.

DATE: January 29, 2013

SUBJECT: Fourth Quarter 2012 Quarterly QA Report – Task Order 2019

This technical memorandum represents the Fourth Quarter 2012 Quarterly QA Report for Task Order 2019, *Quality Assurance Support for the Libby Asbestos Site*. It includes by task and QA element, a summary of QA procedures for the period of October 1, 2012 to December 31, 2012. The QA elements addressed in this quarterly report are consistent with Tasks 1-9 of Task Order 2019, and represent work performed by Shaw Environmental, Inc. under its Quality Assurance Technical Support contract EP-W-10-033.

### Task 1 – Review of Existing Quality Documents

QATS continued to support the development or revision of the following project-specific laboratory modifications and standard operating procedures (SOPs). Table 1 provides the status of the laboratory modifications as of the last monthly conference call on January 16, 2013. Following Table 1 is a detailed description of each laboratory modification.

Table 1 – Laboratory Modifications

Lab Mod	Description	Status	Effective Date
LB-000020B	Preparation and analysis of water samples.	EPA Approved	10/24/2012
LB-000073C	Clarifications to inter-laboratory analyses for PLM-VE and PLM-Gravimetric methods.	M. Lenkauskas Review	NA
LB-000088	Includes a requirement for laboratories performing soil preparation or PLM-VE and/or PLM-Gravimetric analyses to adhere to the most current revision of SOPs.	R. Mahoney Review	NA
LB-000089	Data verification findings of the 2010 Outdoor Activity-Based Sampling (ABS) air analyses and their associated EDDs.	EPA Approved	12/18/2012

 LB-000020B - This modification applies to the preparation and analysis of water samples for the Libby Project. As of July 27, 2010, all water samples associated with the Libby Superfund Site (including OU3) will undergo treatment with ozone/UV light and sonication prior to filtration as specified in Section 6.2 of EPA Method 100.1 (EPA 1983a).





- LB-000073C This modification provides permanent clarifications to inter-laboratory analyses for the Libby-specific PLM-VE (SRC-LIBBY-03) and PLM-Grav (SRC-LIBBY-01) methods; and standardizes the selection and analysis procedures for inter-laboratory samples of soil.
- LB-000088 This modification includes a requirement for all laboratories performing soil preparation or PLM-VE and/or PLM-Gravimetric analyses to adhere to the most current revision of SOPs: ISSI-Libby-01 (Rev.11, 09/25/2012), SRC-Libby-03 (Rev. 3, 7/30/2012), and SRC-Libby-01 (Rev. 3, 12/6/2012) by the effective date referenced.
- LB-000089 This modification was prepared in response to data verification findings of the 2010 Outdoor Activity-Based Sampling (ABS) air analyses and their associated electronic data deliverables (EDDs). During the verification of the outdoor air ABSTEM-ISO 10312 analytical data (EX-1### sample numbers), two issues were identified regarding stopping rules for various analyses.

QATS also performed reviews and provided comments to five field and laboratory SOPs, including EPA-Libby-2012-11, EPA-Libby-2012-12, EPA-Libby-2012-13, EPA-Libby-2012-14, and EPA-Libby-2012-15. Table 2 is a list of SOPs reviewed during the 4<sup>th</sup> quarter of 2012.

SOP **SOP Title** Revision **Effective Date** EPA-Libby 2012-11 **Duff Collection and Analysis** 10/17/2012 4 EPA-Libby 2012-12 Tree Bark Collection and Analysis 10/17/2012 EPA-Libby 2012-13 TEM Tissue Analysis 0 10/23/2012 EPA-Libby-2012-14 Fish Filleting 0 10/17/2012 EPA-Libby 2012-15 Big Game Necropsy 0 10/22/2012

Table 2 - SOPs Reviewed

### Task 2 – Libby Amphibole Laboratory-specific Mentoring Program Support

QATS participated in two Libby Laboratory Conference Calls during this performance period, during which the following issues were discussed:

10/10/2012 Conference Call:

- FTP Site Update
- Quarterly Calibrations Submissions
- SOP Status Update
- Libby Laboratory Modification(s) Update
- Supplemental ABS Analyses
- TEM 2010-2012 Inter-laboratory Study
- Hard Copy Deliverable Standard Format

## 11/07/2012 Conference Call:

- FTP site update
- Filter replicate for bark, duff and FBAS sample analyses
- Libby Laboratory Modification(s) Update
- 2010 and 2011 calibration data request
- PLM-VE issues
- TEM 2010-2012 Inter-laboratory Study
- Hard Copy Deliverable Standard Format

### Task 3 – Track and Coordinate Quality Control (QC) Sample Programs

### **PLM Inter-laboratory Study**

On 11/21/2012, QATS provided Revision 1 of the 2009-2011 PLM Inter-laboratory Study Report, which was initially submitted in September 2012. The report was revised at EPA's request to include the following:

- A summary of the PLM PE Sample analysis results
- A summary of inter-laboratory results and original results from Batta Environmental and MAS Analytical, two laboratories no longer in the program
- A comparison of results between laboratories

### Scribe Weekly Conference Calls

QATS participated in Scribe weekly conference calls on 10/10/2012, 10/17/2012, 10/24/2012, 11/07/2012, 12/05/2012, and 12/12/2012. Topics discussed on these calls included:

- Structure changes to the database
- The development of Scribe-compatible EDDs by CDM-Smith
- Identify discrepancies in the database
- Recommended corrections and adjustments to the database
- Overall improvements to database user interaction

QATS began querying the Scribe database to select samples for multiple TEM inter-laboratory studies. EPA has requested that, in addition to 2012, studies also be conducted from TEM analyses performed in 2010 and 2011.

QATS began querying the Scribe database to select samples for a PLM inter-laboratory study of samples analyzed in the first three quarters of 2012.

### **Quality Control (QC) Sample Program**

In accordance with laboratory modification LB-000073C, QATS selected 1% of the samples analyzed by PLM during the first three quarters of 2012 for the most recent inter-laboratory study. The selected samples were provided to EPA on the required distribution spreadsheet, which identifies the laboratory that performed the original analysis and also the laboratory selected to perform the inter-laboratory analyses.

In accordance with Laboratory Modification LB-000029C, QATS selected 0.5% of the samples analyzed by TEM in 2010 and 2011 for an inter-laboratory study. The selected samples were provided to EPA on the required distribution spreadsheets, which identify the laboratory that performed the original analysis and also the laboratory selected to perform the inter-laboratory analyses. Due to laboratory inability to locate selected samples in their archives, two revisions of the selection for 2010, with optional samples, were also provided during the period.

### Task 4 – Asbestos Sample Data Validation

QATS has begun the development of validation SOPs and associated validation checklists for TEM, PLM, and PCM analyses. Spreadsheets were developed to record laboratory quarterly calibration submissions in an effort to streamline the validation process, and microscope TEM and PLM calibration data for Quarters 1, 2, and 3 of 2012 were entered into the spreadsheets. The calibration data now entered into spreadsheets allows laboratories to only submit the calibration data once, and not with every submitted data package. This also streamlines the validation process by allowing the validator to evaluate the calibration data once, and not every time the calibration data are submitted with each data package.

In accordance with the Site-Wide Quality Assurance Reference Document (QARD), QATS selected 5% of the sample analyses performed from 01/01/2010 through 12/31/2011 for validation. A spreadsheet summarizing the hard copy, electronic data deliverables (EDDs), and calibration data needed to perform the validation activities was provided to EPA for retrieval from the applicable contractors.

### Task 5 – Asbestos Laboratory On-site Audit Support

QATS provided a summary on-site audit report for the on-site audit of the Reservoirs Environmental performed on 09/12-13/2012.

QATS provided resolution reports to EPA for the following on-site audits performed in 2012:

- Hygeia Laboratories, Sierra Madre, CA. (12/06/2012)
- EMSL Analytical, Beltsville, MD. (12/06/2012)
- EMSL Analytical, Cinnaminson, NJ. (12/06/2012)
- EMSL Analytical, Denver, CO. (12/06/2012)
- EMSL Analytical, Libby, MT. (12/31/2012)
- Reservoirs Environmental, Denver, CO. (12/19/2012)
- The Soil Preparation Facility (SPF), Troy, MT. (12/19/2012)
- ESAT Region 8 Laboratory, Golden, CO. (12/31/2012)

With the exception of the response received from the ESAT Region 8 laboratory in Golden, CO, the laboratory responses adequately addressed each of the discrepancies identified by the Audit Team, and therefore, no further EPA resolution was necessary.

In the ESAT Region 8 Laboratory response, the laboratory requested EPA resolution for three defects listed in the audit report. QATS submitted a draft EPA resolution report to EPA on 12/31/2012 requesting EPA resolution for these three defects that the laboratory disagreed with.

## Task 6 – Provide Quarterly Report as a Memorandum

The third (3<sup>rd</sup>) quarterly report was submitted to EPA on 12/04/2012.

# Task 7 – Participate in Quarterly Laboratory Conference Calls

No activities were assigned to-date.

# Task 8 – Provide Annual Summary Report of all QA Activities Performed During the Year

An annual summary report of all QA activities performed during the year is tentatively due on April 15, 2013.

# Task 9 - Modify Existing Libby Site-wide QAPP

No activities were assigned to-date.